BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Name of work: Improvements to CC Road and Drains at Agrahara Village in Ward No. 05

			Estimate Cost Rs.					5000000.00	
Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	KSRRB 300-1. Earth work excavation by manual means in Ordinary Soil soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications.MORTH chapter 3. No. 143/ Item No. 19.1/ PWD SR 2018-19	Cum							
	For Road Surface		1	100.00	4.00	0.20	80.00		
	Desiling of Drains		2	325.00	0.45	0.35	102.38		
	For Flaging Course		4	325.00	0.25	0.30	97.50		
	For SSM Drain Main Road		1	60.00	2.10	1.00	126.00		
	New Slab Drain Near nagesh House		1	100.00	0.75	0.75	56.25		
							462.13	137.80	**63681.00**
	Basic Rate	130.00							
	Area Weightage @ 6%	7.80							
	Total	**137.80**							
2	Removing B.S Slab of Drain and stacking 7.5MM Thick, Page No. 25/ Item No. 5.32/ PWD SR 2018-19	Sqm							
			2	325.00	1.65		1072.50		
	Deduct 25% Missing Slabs						268.13		
							804.38	104.94	**84411.00**
	Basic Rate	99.00							
	Area Weightage @ 6%	5.94							
	Total	**104.94**							
3	Refixing stone slabs of drains and pointing in C.M (1:3) Page No. 25/ Item No. 5.33/ PWD SR 2018-19	Sqm							
			Qty Vide Item No.3				804.38		
							804.38	**111.30**	**89527.00**
	Basic Rate	105.00							
	Area Weightage @ 6%	6.30							
	Total	**111.30**							
4	Providing granite slabs of selected quality roughly dressed and fixed in cement mortar(1:6) including fixing curing etc, complete -do- 7.5 cms thick Page No. 27/ Item No. 5.31.1/ PWD SR 2018-19	**Sqm**							
	For Missing Slabs						268.13		
	For New Slab Drain		1	100.00	1.65		165.00		
							433.13	742.00	**321379.00**
	Basic Rate	700.00							
	Area Weightage @ 6%	42.00							
	Total	**742.00**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
5	KSRRB M600-3. Construction of Rolled Cement Concrete mix 1:4:8 OPC cement @180kgs, with 25mm and down size graded granite metal coarse aggregate at 0.85cum and fine aggregates @0.57cum base course with coarse and fine aggregate conforming to IS:383, aggregate cement ratio 12:1 and minimum cement content of 180kg/ cum, aggregate gradation to be as per Table 600-4 after blending, mixing in batching plant at optimum moisture content, transporting to site, laying with a paver with electronic sensor, compacting with 8-10 tonnes smooth wheeled vibratory roller to achieve, the designed flexural strength, finishing and curing complete as per specifications - No. 175/ Item No. 22.3/ PWD SR 2018-19	**Cum**							
	For CC Road		1	100.00	4.00	0.15	60.00		
	For Flaging Course		4	325.00	0.25	0.15	48.75		
	For SSM Drain Nagesh House		1	60.00	2.10	0.15	18.90		
							127.65	3606.12	**460321.00**
	Basic Rate	3402.00							
	Area Weightage @ 6%	204.12							
	Total	**3606.12**							
6	KSRB 5.2.3 Providing and constructing granite / trap / basalt Size stone masonry in foundation with cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5.1.13 Page No. 25/ Item No. 5.6/ PWD SR 2018-19	cum							
	For SSM Drain		2	60.00	0.60	0.60	43.20		
							43.20	4871.76	**210460.00**
	Basic Rate	4596.00							
	Area Weightage @ 6%	275.76							
	Total	**4871.76**							
7	KSRB 5.3-3 Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5-1.13 Page No. 25/ Item No. 5.9/ PWD SR 2018-19	**Sqm**						5811.98	1,56,923.46
	SSM Drain		2	60.00	0.50	0.45	27.00		
							27.00	**5305.30**	**143243.00**
	Basic Rate	5005.00	5483.00						
	Area Weightage @ 6%	300.30	328.98						
	Total	**5305.30**	5811.98						

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
8	KSRB 4-1.7 : : Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 20mm and down size graded granite metal coarse aggregates @0.84cum and fine aggregates @0.56cum machine mixed, concrete laid in layers not, exceeding 15cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2/P No. 13/ Item No. 4.7/ PWD SR 2018-19	cum							
	For SSM Drain		2	60.00	0.50	0.10	18.00		
	Vent Bed		1	60.00	0.60	0.10	3.60		
	For Flaging Concrete		4	325.00	0.20	0.10	26.00		
							47.60	5627.54	**267871.00**
	Basic Rate	5309.00							
	Area Weightage @ 6%	318.54							
	Total	**5627.54**							
9	KSRB 15.1.3: Providing FLush pointing to coursed stone masonry with cement mortar 1:3, 20 mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. Page No. 115/ Item No. 15.1/ PWD SR 2018-19	Sqm							
	For SSM Drain		2	60.00		0.50	60.00		
							60.00	223.66	**13420.00**
	Basic Rate	211.00							
	Area Weightage @ 6%	12.66							
	Total	**223.66**							
10	KSRB 5-14 : Providing and constructing precast concrete solid blocks with compressive strength not les than 35 Kg/sqm with cement mortar 1:4 masonry (quoin, Jamb, closer blocks) with solid concrete blocks of size 40x20x20 cms conforming to I.S: 2185/1965 in superstructure including cost of materials, labour charges, scaffolding, curing complete as per specifications. Page No. 26/ Item No. 5.27/ PWD SR 2018-19	Sqm							
	For Raising Course Drain		4	325.00		0.40	520.00		
							520.00	966.72	**502694.00**
	Basic Rate	912.00							
	Area Weightage @ 6%	54.72							
	Total	**966.72**							
11	Precast slab 20mm and down size for slab (including steel reinforcement) including centring and shutterng machine mixed concrete laid in layers not exceeding 15cms thick well compacted cost of all materials labour HOM of machineries curing complete as per specifications c.c 1:1.5:3 Including all cost of Matirial (DATA RATE ENCLOSED) 10cm thick RCC pre cast slab	Sqm							
	For Flaging Course		2	325.00	1.20		780.00		
	For SSM Drain		1	63.00	1.60		100.80		
							880.80	2100.00	**1849680.00**
	Data Rate	**2100.00**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
12	Providing and laying cement concrete using 20mm and down size granite jelly of ready mixed concrete (RMC)for R.C.C works laid in 15cms thick layers and well compacted vibrating, curing, finishing with necessary cement mortar, form works and scaffoldings to withstand pumping of concrete, with all lead and lifts etc., complete (exclusive of cost of steel and fabrication charges.) Ready mixed Cement concrete M-20 for raft foundation, column footing, main and secondary beams. Page No. 18/ Item No. 4.48/ PWD SR 2018-19	Cum							
	For CC Road		1	100.00	4.00	0.10	40.00		
							40.00	5770.64	**230826.00**
	Basic Rate	5444.00							
	Area Weightage @ 6%	326.64							
	Total	**5770.64**							
13	KSRRB M2600-3: (ii) Providing & fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specification complete as per specifications, MORTH specification No. 2605, No. 233/ 244 Item No. 31.3 PWD SR 2018-19	M							
	For CC Road		25	4.00			100.00		
							100.00	126.14	**12614.00**
	Basic Rate	119.00							
	Area Weightage @ 6%	7.14							
	Total	**126.14**							
14	Vaccum De- writing with vaccum pump and suction mat and compaction with skin flater clubbed with floatiog disc including cost of generator, HOM of machinery Sereed Vibratory Power Floaterblade and diisc etc. with all lead and lift No. 171/ Item No. 22.7/ PWD SR 2018-19	Sqm							
	For CC Road		1	100.00	4.00		400.00		
							400.00	**72.08**	**28832.00**
	Basic Rate	68.00							
	Area Weightage @ 6%	4.08							
	Total	**72.08**							
15	KSRRB M100-2. Loading and Unloading of stone boulders by manual means complete as per specification MORTH-100/chapter-1 Page No. 136/ Item No. 17.1/ PWD SR 2018-19	Cum							
			Qty. Vide Item No. 1+2				**462.13**		
							462.13	60.42	**27922.00**
	Basic Rate	57.00							
	Area Weightage @ 6%	3.42							
	Total	**60.42**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
							Grand Total		4306881.00
16	For 12% Applicable GST								516826.00
17	For 3% KRIDL Charges								129206.00
18	For 1% Labour Cess								43069.00
19	Miscesallaneous Charges	L/S							4018.00
20	For DPR & PMC charges								5000000.00

Certificate:

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per PWD SR of 2018-19
3 This Estimate Grant under SC-SP/TSP Mukyamantrigala Nava Bengaluru Yojane
4 The provisions were made in this estimate are necessary and adequate.
5 This works come under B.B.M.P. limits.

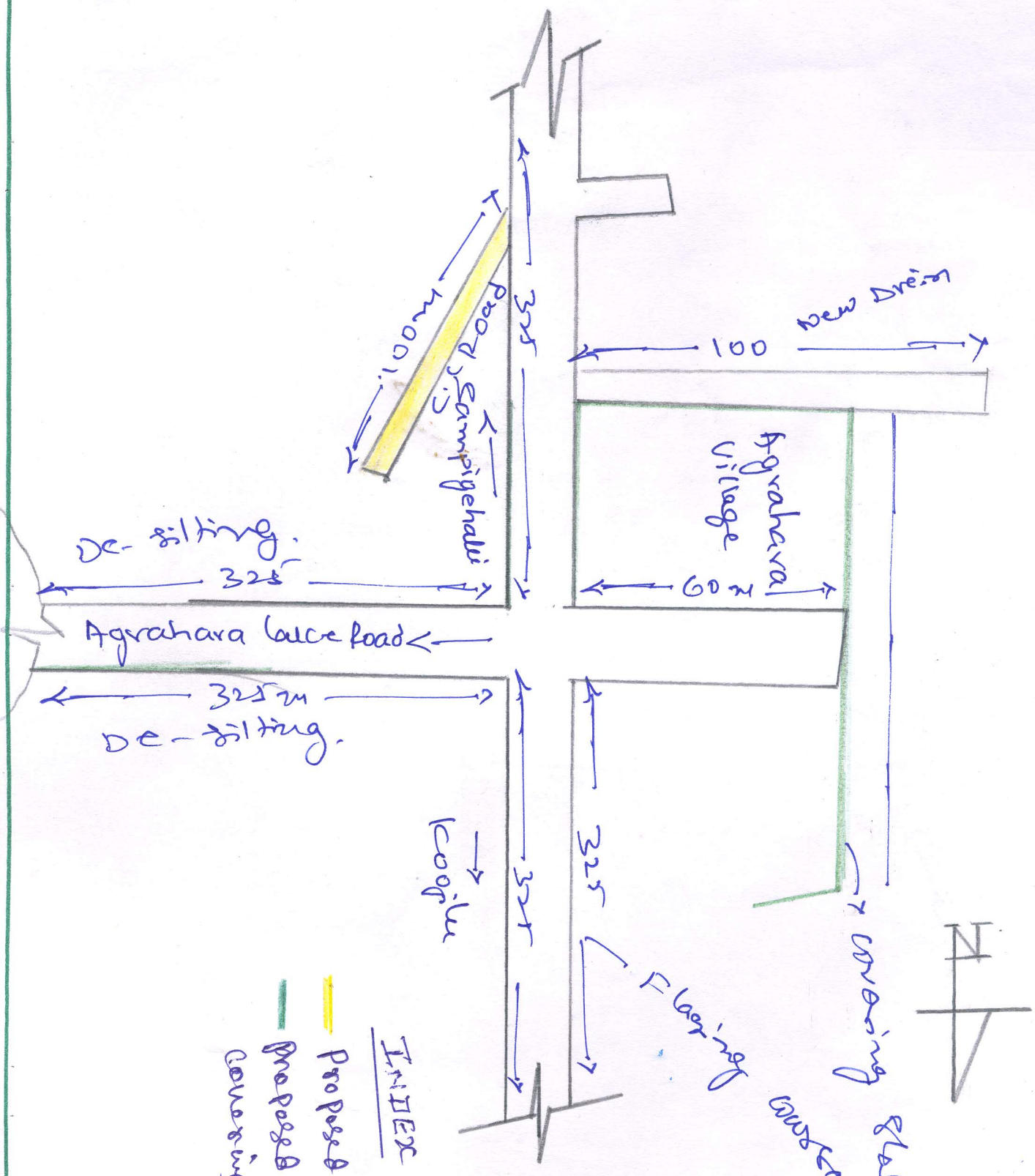
Assistant Engineer
Ward No. 05(Jakkur)

Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division

Assistant Executive Engineer
Byatarayanapura Sub Division

ADMINISTRATIVE APPROVAL
Accorded For Rs. 50.00 Fifty Lakhs only
Head of a/c P3727, SC-SP/TSP
Adm. Ref. No. 80 Date 24-10-19
24/10
EE(BTP) 24/10

Rs. 50.00 LAKH ONLY
FIFTY LAKH ONLY
P 3727 SC-SP/TSP
Code No 005-20-000007
Registered as SE(Y)/TS/ 03 / 2019-20 subject to conditions contained in enclosed memo 03 / 2019-20 Dated: 07/11/2019
TA
07/11/2019
SE(Yelahanka)



ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-24

ಸಹಾಯಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

BYATARAYANAPURA DIVISION

BYATARAYANAPURA SUB DIVISOIN

Name of the Work : **Improvements to Water Tanker Supply in Ward No. 05**

Estimated Cost : **99.00 Lakhs**

Work Code : **005-20-000009**

ಅಂದಾಜು ಪಟ್ಟಿಯ ವರದಿ

ವಿಷಯ: ವಾರ್ಡ್ ನಂ. 05(ಜಕ್ಕೂರು) ವ್ಯಾಪ್ತಿಯ Improvements to Water Tanker Supply in Ward No. 05 ಕಾಮಗಾರಿಗೆ ಅನುಮೋದನೆ ನೀಡುವ ಕುರಿತು.

ಮೇಲ್ಕಂಡ ವಿಷಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ, ವಾರ್ಡ್ ನಂ. 05(ಜಕ್ಕೂರು) ವ್ಯಾಪ್ತಿಯ **Improvements to Water Tanker Supply in Ward No. 05** ಕಾಮಗಾರಿಗೆ ವಾರ್ಡ್ ನಂ. 05ರ ವ್ಯಾಪ್ತಿಯಲ್ಲಿ ಶೇ. 50% ಕ್ಕೂ ಹೆಚ್ಚಾಗಿ ಪರಿಶಿಷ್ಟ ಜಾತಿ ಮತ್ತು ಪರಿಶಿಷ್ಟ ಪಂಗಡದ ಜನಾಂಗದವರು ವಾಸವಾಗಿರುವಂತೆ ಸಹಾಯಕ ಕಂದಾಯ ಅಧಿಕಾರಿ, ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ ರವರ ದೃಢೀಕರಣದಂತೆ ಸದರಿ ಪ್ರದೇಶದಲ್ಲಿ ಹೊಸದಾಗಿ ಬೋರ್‌ವೆಲ್‌ಗಳನ್ನು ಕೊರೆಯುವ ಹಾಗೂ ಕುಡಿಯುವ ನೀರಿನ ಸರಬರಾಜು ಕಾಮಗಾರಿಯನ್ನು ಕೈಗೊಳ್ಳಲು ಪಿ-3727 SC-SP/TSP Mukyamantrigala Nava Bengaluru Yojane ಅಡಿಯಲ್ಲಿ ಕಾಮಗಾರಿಯನ್ನು ಕೈಗೊಳ್ಳಲು ರೂ. 99.00 ಲಕ್ಷಗಳ ಅಂದಾಜು ಮೊತ್ತದಲ್ಲಿ ಕಾಮಗಾರಿ ಸಂಕೇತ 005-20-000009 ರಂತೆ ನೀಡಲಾಗಿರುತ್ತದೆ.

ಅದರಂತೆ ಸದರಿ ಸ್ಥಳದಲ್ಲಿ ಅಭಿವೃದ್ಧಿ ಕಾಮಗಾರಿಯನ್ನು ಕೈಗೊಳ್ಳಲು ಅಂದಾಜು ಪಟ್ಟಿಯನ್ನು ಈ ಕೆಳಕಂಡ ಐಟಂಗಳನ್ನು ಅಳವಡಿಸಿ ತಯಾರಿಸಲಾಗಿರುತ್ತದೆ.

5. ಹೊಸದಾಗಿ ಬೋರ್‌ವೆಲ್‌ಗಳನ್ನು ಕೊರೆದು ಪಂಪು ಮತ್ತು ಮೋಟಾರ್ ಅಳವಡಿಸುವುದು.
6. ಸದರಿ ಬೋರ್‌ವೆಲ್‌ಗಳಿಗೆ ವಿದ್ಯುತ್‌ಧೀಕರಣಗೊಳಿಸುವುದು.
7. ಸದರಿ ಬೋರ್‌ವೆಲ್‌ಗಳಿಗೆ ಕೊಳವೆ ಸಾಲುಗಳನ್ನು ಅಳವಡಿಸುವುದು.
8. ಟ್ಯಾಂಕರ್ ಮೂಲಕ ಕುಡಿಯುವ ನೀರಿನ ಸರಬರಾಜು ಮಾಡುವುದು. ಹಾಗೂ ಇತರೆ ಅವಶ್ಯಕ ಅಂಶಗಳಿಗೆ ಅಂದಾಜಿನಲ್ಲಿ ಅವಕಾಶ ಕಲ್ಪಿಸಿಕೊಂಡಿರುತ್ತದೆ.

ಮೇಲ್ಕಂಡ ಅಂಶಗಳನ್ನು ಅಳವಡಿಸಿ ಅಂದಾಜು ಪಟ್ಟಿಯನ್ನು ಬೆಂಗಳೂರು ವೃತ್ತ, ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆಯ 2018-19ನೇ ಸಾಲಿನ ದರ ಪಟ್ಟಿ, ಬಿ.ಡಬ್ಲ್ಯೂ.ಎಸ್.ಎಸ್.ಬಿ. ಮತ್ತು ಆರ್.ಡಿ.ಪಿ.ಆರ್ ದರಪಟ್ಟಿಗಳ ದರಗಳನ್ನು ಅಳವಡಿಸಿ ತಯಾರಿಸಲಾಗಿರುತ್ತದೆ.

ಅದುದರಿಂದ ಸದರಿ ಅಂದಾಜು ಪಟ್ಟಿಗೆ ಆಡಳಿತಾತ್ಮಕ ಮತ್ತು ತಾಂತ್ರಿಕ ಮಂಜೂರಾತಿ ನೀಡಿ ಕಾಮಗಾರಿಯನ್ನು ತುರ್ತಾಗಿ ನಿರ್ವಹಿಸಬೇಕಾಗಿರುವುದರಿಂದ ಮೇ॥ ಕೆ.ಆರ್.ಐ.ಡಿ.ಎಲ್ ಸಂಸ್ಥೆಯ ವತಿಯಿಂದ ನಿರ್ವಹಿಸಲು ತುರ್ತಾಗಿ ಕಾರ್ಯದೇಶ ನೀಡಲು ಮುಂದಿನ ಸೂಕ್ತ ಆದೇಶಕ್ಕಾಗಿ ಸಲ್ಲಿಸಿದೆ.

ಸಹಾಯಕ ಅಭಿಯಂತರರು

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿಬಿಎಂಪಿ ಬೆಂಗಳೂರು-24

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Estimate Cost Rs. 9900000.00

Name of Work: Improvements to Water Tanker Supply in Ward No. 05

Description of item	Unit	No	L	B	D	Qty	Rate	Amount
Supply of Drinking Water through water tankers of Capacity 5000 Liters Hiring of Water Tanker (Page No. XLVIII, Code No. 1032) PWD SR 2018-19	per day	1				1	410.00	410.00
1023 - Hire Charges of Tractor 40 HP including Operator and Fuel (P. XLVIII/I. 19) PWD SR 2018-19	per day	1				1	1288.00	1288.00
Procurement of Water --Rs. 216.00 / Load (5000 Liters) Considering 5000 Liters cost is Rs. 108.00/Load Considering 5 Loads/Day 5X108.00=540.00	Per Load	5				5	108.00	540.00
Engaging Heavy Mazdoor **(Page No. XXXXXII, Sl No. 5, PWD SR 2018-19)**		1				1	446.20	446.20
								2684.20
			For 1 Load					2684.20/5
								536.84
			Say					**537.00**
	Rs. 537.00/Load							
Kogilu, Kogilu Layout and Agrahara and Agrahara layout Surrounding area Considering 4 Tractors 4 Loads/Day and for 6 Months 3 X 4 X 180 X 537.00=								1153476.00
Kattigenahalli Dwarakanagra Surrounding area Considering 3 Tractors 4 Loads/Day and for 6 Months 3 X 4 X 180 X 537.00=								1147032.00
Jakkur and Srirampura Surrounding area Considering 3 Tractors 4 Loads/Day and for 6 Months 3 X 4 X 180 X 537.00=								1147032.00
	Extra 60 Loads				60X 537.00=			32220.00
								3479760.00
Drilling and Providing Pump and Motor								
Geophysical investigation of site for sinking borewell for supplying drinking water to the habitation either through the hand pump, MWS or P.W.S.S. by vertical electrical sounding by adopting venner or schlumbergers's method, including reconnaissance survey of geological formation, Geological investigation of existing ground water in vicinity, its quality, quantity & acceptability of the users indicating the location of site, recommended depth of casing pipe required to seal the top unconsolidated formation including an extra depth of 1.0 mtr in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site, engaging technical personal and	Each BW	6				6	1938.46	**11631.00**
Basic Rate	1882.00							
3% area weightage	56.46							
Total	**1938.46**							

Description of item	Unit	No	L	B	D	Qty	Rate	Amount
Sinking of borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above 900 CMF & above in all strata including over budern upto 20 m. fixing of casing pipes, collars & cap with necessary cutting, threading & welding including transportation of rig and supporting vehicle, crew charges & cost of consumables etc., complete including yield testing at the final depth with minimum working of compressor for one hour(excluding cost of casing pipes, collars, cap etc.,) (P.NO-47, I.NO-9.1, PRED 12-13 SR)	Rmtr							
0 to 50 m		6	50.00			**300.00**	315.18	**94554.00**
50 to 100 m		6	50.00			**300.00**	412.00	**123600.00**
100 to 150 m		6	50.00			**300.00**	458.35	**137505.00**
150 to 200 m		6	50.00			**300.00**	484.10	**145230.00**
200 to 250 m		6	50.00			**300.00**	560.32	**168096.00**
250 to 300 m		6	50.00			**300.00**	600.49	**180147.00**
300 to 370 m		6	91.27			**547.60**	622.00	**340607.00**
Supplying of ISI Mark 175 mm nominal bore medium black ERW casing pipe of 5mm thick black electric resistance continous welded midle steel tube material confirming to IS 1387/!993 and manufactured from hot rolled steel skelp/stripes in random length of 4 to 7 mtr both ends threaded confirming to IS 554/1985 one end(including of all taxes) (P.NO-III, I.NO-84, PRED 12-13 SR)	Rmtr							
		6	68.00			**408.00**	1364.75	**556818.00**
Basic Rate	1325.00							
3% area weightage	39.75							
Total	**1364.75**							
Providing and fixing 250mm dia PVC pipe and as per specification and directions. (BWSSB SR 13-14, P.No.53 I.no.1 of	Rmtr							
		6	10.00			**60.00**	1133.00	**67980.00**
Basic Rate	1100.00							
3% area weightage	33.00							
Total	**1133.00**							
175 mm dia M.S. Casing cap (P.NO-III, I.NO-85, PRED 12-13 SR)	Each							
		6				**6**	103.00	**618.00**
Basic Rate	100.00							
3% area weightage	3.00							
Total	**103.00**							
M.S. Casing pipe collars 'C' Class (P.NO-III, I.NO-86, PRED 12-13 SR)	Each	6	11			**68**	154.50	**10506.00**
Basic Rate	150.00							
3% area weightage	4.50							
Total	**154.50**							

Description of item	Unit	No	L	B	D	Qty	Rate	Amount
Fabricating supplying and mounting MS box of 16 SWG suitable for floor / wall mounting, fully weather proof with provision for better hear description, (providing with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished 2 coats of red oxide primes paint and finally finished with approved colour enamelled metal paint etc,. complete box of 21600 sq cm (P.NO-530, I.NO-39 b, BWSSB SR 13-14)	Sq cm							
		6	1100	20.00		**132000.00**	0.34	**44880.00**
Basic Rate	0.33							
3% area weightage	0.01							
Total	**0.340**							
Labour charges for erection of new /repaired submersible pumpset along with GI pipes (32/50mm) cable (new submersible pumpset if required will be supplied by the department free of cost and released pump set should be handed over to department) including transportation (each length = 6.00m) (P.No - 564, I.No - 3, BWSSB SR 13-14)	Per length							
		6	55.00			**330.00**	90.64	**29911.00**
Basic Rate	88.00							
3% area weightage	2.64							
Total	90.64							
Erection of combined panel board meter board with all necessary materials and labour including providing CC 1:3:6 foundation bed etc,. Complete for basement out door type. (MR)	No's							
		6	1.00			**6.00**	475.00	**2850.00**
Supplying and fixing of Porcelain fuse channel with cut out on existing wooden / panel using necessary nuts, bolts and washer etc., complete.... **P No. 32/I No 3b KPWD Electrical SR 2010-11**	No.							
63 Amps		6	3.00			**18.00**		
						18.00	150.00	**2700.00**
Supplying and laying of L.T.U.G Cable having aluminiumconductor PVC insulated shethed galvanised steel wire/ steel tape armoured cable with PVC outer sheathing 1.1 KV class 4 core 16 sqmm cable (confirming to IS 1554) (P.NO - 553, I.NO - 10 (d), BWSSB SR 13-14)	Mtr							
		6	35.00			**210.00**	169.95	**35689.50**
Basic Rate	165.00							
3% area weightage	4.95							
Total	169.95							
Digging of trenches of 0.6mm x 0.50 Mtrs wide refilling the trench to the required ground level and consolidating etc,. Complete sutting road surfaces (P.NO - 554, I.NO - 12 (b), BWSSB SR 13-14)	Mtr							
		6	35.00			**210.00**	56.65	**11896.50**

Description of item	Unit	No	L	B	D	Qty	Rate	Amount
Basic Rate	55							
3% area weightage	1.65							
Total	56.65							
Supplying and fixing Class-A GI Pipe on pole/ wall/drain crossing with necessary clamping arrangements for UG Cable of 1.1 KV class 40mm (P.NO - 555, I.NO - 15 (b), BWSSB SR 13-14)	Mtr							
		6	3.00			**18.00**	294.58	**5302.00**
Basic Rate	286.00							
3% area weightage	8.58							
Total	294.58							
Supplying and fixing wiring earth electrode for grounding conduits, IC cutouts and other equipments on the meter board using 40mm dia 2.90 mm thick GI pipe 2.5 mtr long buried in a pit,/ the pit should be filled with equal proportion of salt and charocal 150 mm alround the pipe to complete depth the connections from the pipe to the conduit etc,. is to be established though GI wire of size as per ISI specification 7.3.3 of ISI 732 using 12mm dia boalts, nuts washers and checknuts etc,. the pipe shall have 16 through holes of 122mm dia (P.NO - 552,	No's							
		6				**6.00**	1699.50	**10197.00**
Basic Rate	1650.00							
3% area weightage	49.50							
Total	1699.50							
Supply and fixing LT cast iron pot heads suitable for 1.1 KV class 16 sqmmUG cable filled with necessary bitumen/ insulating compound complete with terminals, clamps, bolts nuts and washers etc, (P.NO - 555, I.NO - 16 (b) , BWSSB SR 13-14)	No's							
		6				**6.00**	271.92	**1632.00**
Basic Rate	264.00							
3% area weightage	7.92							
Total	271.92							
Supplying and fixing of polished wood board made of not less than 15mm thick plank on both sides with planks made out on not more than 2 pieces and fixing the same to wall using tapered inverted wooden plugs screws etc., Size 20 x 20 x 2.5 inches (P.NO - 521, I.NO - 2 (f), BWSSB SR 13-14)	No's							
		6				**6.00**	311.58	**1869.00**
Basic Rate	302.500							
3% area weightage	9.075							
Total	311.575							
Borewell Cap and Clamp Set (PWD SR 2018-19, Page No. XLVII, Sl nO. 17)	Set	6				**6.00**	1800.00	**10800.00**

Description of item	Unit	No	L	B	D	Qty	Rate	Amount
Supply & delivery at site brand new texmo/innoval/lubi/sabar /Atalanta/calamal/ waterman/Radha make suitable HP deep well submercible pumpset suitable for vertical installation in 150 dia borewells compressing of single stage or multistage CF pump close coupled by means of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water squirrel cagesubmercible induction motor suitable for operation of 3Ph, 50Hz.380/440 volts AC supply fitted with required accessories such as suction, casing, suction strainers, sand guard. Non return valve etc Complete the pump and motor shall from an integral unit with all the required fittings 17.50 HP 30 stage (P.NO-XXXXIII, I.NO-34, PWD SR 18-19)	No							
17.5HP 30 Stage		3				**3**	72126.00	**216378.00**
20 HP 40 Stage		3				**3**	90595.00	**271785.00**
Basic Rate	72126.00							
Providing, laying & jointing GI pipes confirming to IS specification of approved make with fittings such as collars bends elbows tees nipples plugs with cuts threads using white lead & threads for joints wherever necessary as per direction including all lead & lift etc,. complete 'A' grade(excluding cost of fittings) 50mm dia GI pipe B Class (SR 18-19 PWD, P.No.XLVII	Rmtr							
		6	330.00			**1980.00**	415.00	**821700.00**
Basic Rate	415.00							
Supply and fixing Collar for GI Pipes 50MM (Page No. XLVII, Sl NO.2, PWD SR-2018-19	No's	6	55.00			**330.00**	180.00	**59400.00**
Supplying of submersible pump cable 1X3X6..0 Sq.mm (Page No. XLVII, Sl NO. 8, PWD SR-2018-19	Mtr							
	6X2	12	340.00			**4080.00**	144.00	**587520.00**
Supplying & delivery at site brand new / Essen / Lotus sunsines/Adarsh/ Gk controls best indigenous make combine energy meter-cum-control panel board unit of size 1200 x 600 x 300 mm minimum mechanically strong and vermin and water proof the unit shall have two detachable doors suitable for operation on 3ph, 50Hz, 380/440 volts, AC supply with spring loaded latch locking with a key ribs should be provided inside the door , canopy apron and louvers ventilators shall be provided the combine energy mtr - cum control panel board unit suitable for operation on 3ph, 50Hz, 380/440 AC supply shall be consisted etc,. completed T panel board shall be fabricated on single unit in the above components panel board for suitable pumpset above components panel board for suitable pumpset above Up to 20HP with star delta starter (MR) Page No. XLVII, Sl NO.	No.							

	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
			6				**6.00**	21000.00	**126000.00**
	Supplying & delivery of brand 50mm Gate Valve. (PWD SR 18-19, P.NO.XLVII Sl.no, 15	No's							
			6				**6.00**	1800.00	**10800.00**
	Supplying & delivery of brand 50mm Non Return Valve. (PWD SR 18-19, P.NO.XLVII Sl.no, 16	No's							
			6				**6.00**	1800.00	**10800.00**
	Supplying and fixing MCB (P.NO - XLVII, SL.NO - 19, PWD SR 18-19)	No's							
			6				**6.00**	900.00	**5400.00**
	Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in Ordinary soil not exceeding 1.5 m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m after breaking of clods complete as per specifications (P.NO - 6, I.NO - 2.3, PWD SR 18-19)	Cum							
			6	251.40	0.60	0.75	**678.78**		
							678.78	316.94	**215133.00**
	Basic Rate	299.00							
	6% area weightage	17.94							
	Total	316.94							
8	Providing and installing at site of work 63mm (0.662) PVC Pipes of 6 kg / cm2 including cost of pipes and specials and labour, including lowering into trenches, laying true to line, level and perfect linking at joints leak proof including jointing of approved type with all labour and lift charges, handling charges including encasing the pipe alround to a depth not less than 15cms with gravel or selected earth available from the excavation etc., complete (P.NO - 94, I.NO - 13.73.2, PWD SR 18-19)	Mtr							
			6	251.40			**1508.40**		
							1508.40	394.32	**594792.00**
	Basic Rate	372.00							
	6% area weightage	22.32							
	Total	394.32							
9	Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m and lift upto 1.5m including cost of all labour complete as per specifications (P.NO - 7, I.NO - 2.11, PWD SR 18-19)	Cum							
			6	251.40	0.60	0.75	**678.78**		
							678.78	128.26	**87060.00**
	Basic Rate	121.00							
	6% area weightage	7.26							

Description of item	Unit	No		B	D	Qty	Rate	Amount
Total	128.26							
BESCOM Deposit charges	No's	6				**6.00**	14500.00	**87000.00**
	Total of Other SR Items including GST Unit Rate							**1984219.00**
	Total of PWD SR 2018-19 Items							**6584328.00**
	Grand Total							**8568547.00**
For 12% GST for Only PWD SR-2018-19 items								**790119.00**
For 3% KRIDL Charges								**257056.00**
For 1% Labour Cess								**85685.00**
For DPR and PMC Charges 1%								**198000.00**
Miscellaneous and Unforeseen Charges	L/S							**593.00**
							Total	**9900000.00**

RTIFICATE :

The work spot has been inspected and the work is found necessary.
This estimate is prepared as per PWD SR 2018-19, PRED and BWSSB SR of Rural Engineering Department
This Estimate Grant under SC-SP/TSP Mukyamantrigala Nava Bengaluru Yojane
The provisions were made in this estimate are necessary and adequate.
This works come under B.B.M.P. limits.

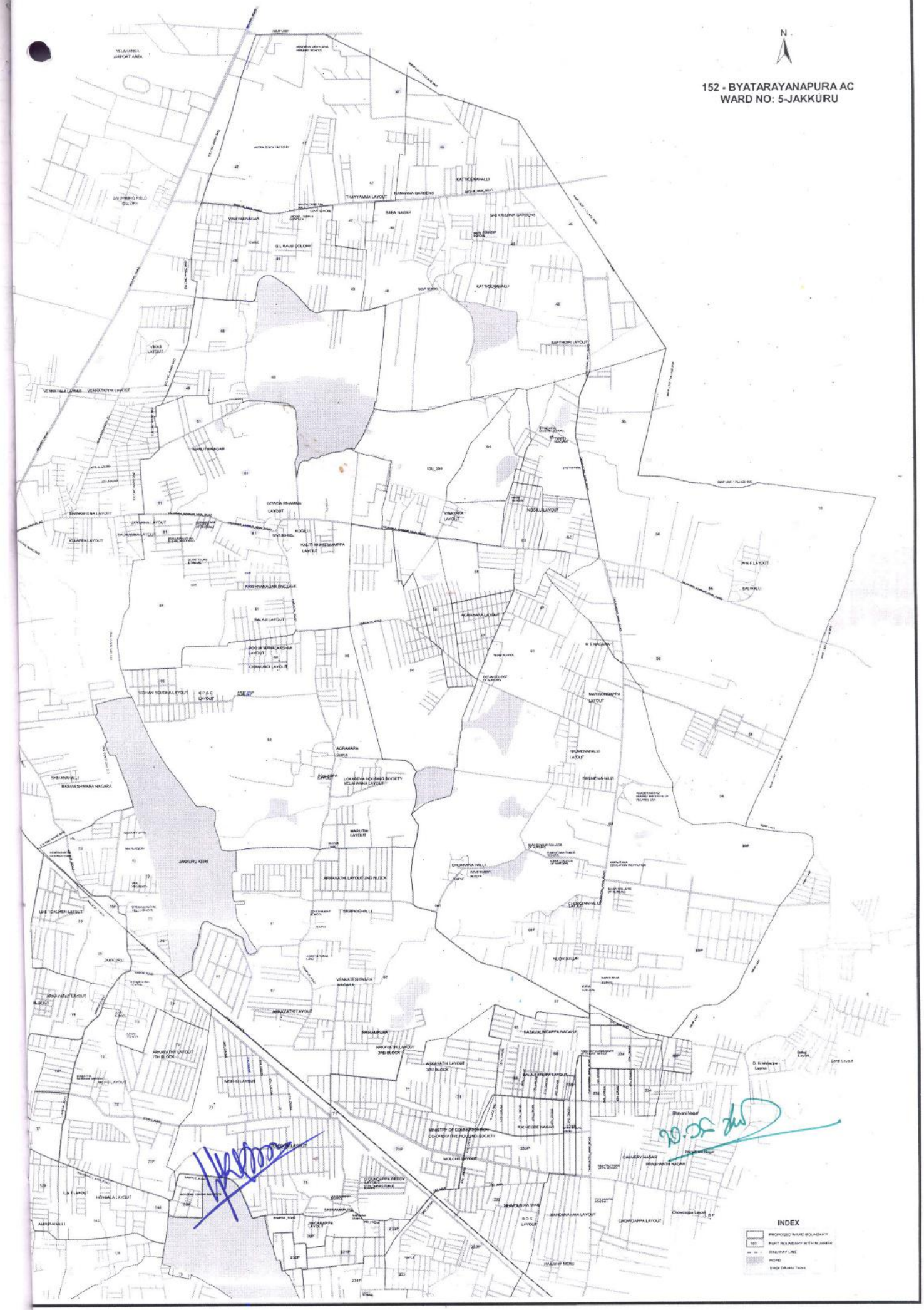
Assistant Engineer

Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike

Executive Engineer
Bruhat Bangalore Mahanagara Palike

ADMINISTRATIVE APPROVAL
Accorded For Rs. 99.00 Lakhs only
Head of A/c. P3727,
Div. Ref. No. 82/19-20 Date 24-10-19
AE
EE(BTP) 24/10

Technical Sanction
Accorded For Rs. 99.00 lakhs only
Head of A/C. P 3727
CER NO :..12-9..... Dt:.. 28.10.2019
TA
CE (YNK)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152 - BYATARAYANAPURA AC
WARD NO: 5-JAKKURU
INDEX

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Name of work: Improvements to Compound Wall and Park Developments in Ward No. 05

			Estimate Cost Rs.					9900000.00	
Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	KSRRB 200-8. Clearing and grubbing road land including uprooting rank vegetation, grass, brush, shrubs, saplings and trees of girth upto 300mm, by manual means, in area of light jungle, removal of stumps, disposal of unserviceable materials, stacking of serviceable materials labour charges complete as per specifications. MORTH / Chapter 2 (P.No.138, I.No.18.11 of PW, P&IWTD SR 2018-19)	Sqm							
	For Telecom layout Park Near Srirampura		2	130.00	2.00		520.00		
	Telecom Layout Park		1	150.00	2.00		300.00		
							820.00	**10.60**	**8692.00**
	Basic Rate	10.00							
	Area Weightage @ 6%	0.60							
	Total	**10.60**							
2	KSRRB 300-1. Earth work excavation by manual means in Ordinary Soil soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications.MORTH chapter 3. No. 143/ Item No. 19.1/ PWD SR 2018-19	Cum							
	For Compound Wall elecom layout Park Near Srirampura		1	130.00	1.20	1.50	234.00		
	Telecom Layout Park		1	65.00	0.90	0.90	52.65		
	For Concrete Benches		15	3.00	3.00	0.60	81.00		
	For Plying Equipment area		1	17.30	13.10	0.60	135.98		
	For Street Lights		14	0.45	0.45	0.60	1.70		
							505.33	137.80	**69634.00**
	Basic Rate	130.00							
	Area Weightage @ 6%	7.80							
	Total	**137.80**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
3	KSRB-4-1.3 : Providing and laying in position plain cement concrete of mix M 1:4:8 withOPC cement at 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @0.57cum machine mixed, concrete laid in layers not, exceeding 15cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2, No. 13/ Item No. 4.3/ PWD SR 2018-19	Cum							
	For Compound Wall Telecom layout Park Near Srirampura		1	130.00	1.20	0.15	23.40		
	Telecom Layout park		1	65.00	0.90	0.15	8.78		
	For Concrete Benches		15	3.00	3.00	0.15	20.25		
	For Plying Equipment area		1	17.30	13.10	0.15	33.99		
	For Street Lights		14	0.45	0.45	0.15	0.43		
							86.84	5408.12	**469667.00**
	Basic Rate	5102.00							
	Area Weightage @ 6%	306.12							
	Total	**5408.12**							
4	KSRRB M300-53: construction of embankment with approved material gravel/murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement table 300-2 complete as per specifications. (which includes cost of gravel/murrum, watering charges & compaction by vibratory roller) MORTH specification Page No. 147/ Item No. 19.60/ PWD SR 2018-19	Cum							
	For Concrete Benches		15	2.60	2.60	0.25	25.35		
	For Plying Equipment area		1	17.30	13.10	0.25	56.66		
							82.01	**344.50**	**28252.00**
	Basic Rate	325.00							
	Area Weightage @ 6%	19.50							
	Total	**344.50**							
5	KSRB 5.2.3 Providing and constructing granite / trap / basalt Size stone masonry in foundation with cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5.1.13 Page No. 25/ Item No. 5.6/ PWD SR 2018-19	cum							
	For Compound Wall		1	130.00	0.90+.75	1.00	107.25		
					2				
	For Telecom Layout Park		1	65.00	0.75+0.60	0.75	32.91		
					2				
							140.16	4871.76	**682808.00**
	Basic Rate	4596.00							
	Area Weightage @ 6%	275.76							
	Total	**4871.76**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
6	KSRB 5.3-3 Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5-1.13 Page No. 25/ Item No. 5.9/ PWD SR 2018-19	Sqm							
	For Compound Wall Telecom layout Park Near Srirampura		1	130.00	0.75+0.45	1.00	78.00		
					2				
			1	50.00	0.45	0.60	13.50		
	For Telecom Layout Park		1	65.00	0.60+0.45	0.45	15.36		
					2				
							106.86	**5811.98**	**621046.00**
	Basic Rate	5483.00							
	Area Weightage @ 6%	328.98							
	Total	**5811.98**							
7	KSRB 4-1.7 : : Providing and laying in position plain cement concrete of mix 1:3:6 withOPC cement @ 220kgs, with 20mm and down size graded granite metal coarse aggregates @0.84cum and fine aggregates @0.56cum machine mixed, concrete laid in layers not, exceeding 15cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2/P No. 13/ Item No. 4.7/ PWD SR 2018-19	cum							
	SSM Coaping Telecom layout Park Near Srirampura		1	180.00	0.45	0.10	8.10		
	Top		1	180.00	0.20	0.10	3.60		
	SSM Coaping to Telecom Layout Park		1	65.00	0.45	0.10	2.93		
	For Concrete Benches		15	2.60	2.60	0.20	20.28		
	For Plying Equipment area		1	17.30	13.10	0.15	33.99		
							68.90	5627.54	**387735.00**
	Basic Rate	5309.00							
	Area Weightage @ 6%	318.54							
	Total	**5627.54**							
8	KSRB 5-14 : Providing and constructing precast concrete solid blocks with compressive strength not les than 35 Kg/sqm with cement mortar 1:4 masonry (quoin, Jamb, closer blocks) with solid concrete blocks of size 40x20x20 cms conforming to I.S: 2185/1965 in superstructure including cost of materials, labour charges, scaffolding, curing complete as per specifications. Page No. 27/ Item No. 5.27/ PWD SR 2018-19	Sqm							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
			1	130.00		1.20	**156.00**		
			1	50.00		1.50	**75.00**		
	For Concrete Benches		15X2	3.00		0.60	**54.00**		
			15X2	2.60		0.60	**46.80**		
							331.80	966.72	**320758.00**
	Basic Rate	912.00							
	Area Weightage @ 6%	54.72							
	Total	**966.72**							
9	KSRB 15.1.3: Providing FLush pointing to coursed stone masonry with cement mortar 1:3, 20 mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. Page No. 115/ Item No. 15.1/ PWD SR 2018-19	Sqm							
	For Compound Wall Telecom layout Park Near Srirampura		2	180.00		0.60	216.00		
			2	60.00		0.60	72.00		
							288.00	223.66	**64414.00**
	Basic Rate	211.00							
	Area Weightage @ 6%	12.66							
	Total	**223.66**							
10	5.29(b) Providing and fixing pre cast solid cement concrete kerb stones made out of C.C 1:2:4 with top and bottom width 114 and 165mm repectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including formwork curing, including, cost of all materials, labour hire charges of machinery, loading unloading, lead and lift, transportation etc, complete. Page No. 25/ Item No. 5.30/ PWD SR 2018-19	Sqm							
	Kerb Stone		2	300.00			600.00		
	For Telecom Layout Park		2	150.00			300.00		
				I e 630.00/0.45			900.00		
							2000.00	432.48	**864960.00**
	Basic Rate	408.00							
	Area Weightage @ 6%	24.48							
	Total	**432.48**							
11	KSRB 15-17.5: Applying priming coat over new wood surface and / or wood based surface preparing the surface after thoroughly cleaning oil, grease, dirt, and foreign matter, sand papering and knotting ready mix paint including cost of materials, labour, complete as per specifications. Page No. 118/ Item No. 15.59 / PWD SR 2018-19	**Sqm**							
	Kerb Stone Painting		2	300.00		0.30	**180.00**		
	For Telecom Layout Park		2	150.00		0.30	**90.00**		
							270.00	**53.00**	**14310.00**
	Basic Rate	50.00							
	Area Weightage @ 6%	3.00							
	Total	**53.00**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
12	KSRB 15-17.6: Providing and applying painting two coats (excluding priming coat) on new wood surface and / or wood based surface with enamel paint to give an even shade, cleaning the surface of all dirt, dust and foreign matter, sand papering including cost of materials, labour, complete as per specifications.Page No. 119/ Item No. 15.60.1 / PWD SR 2018-19								
			2	300.00		0.30	180.00		
	For Telecom Layout park		2	150.00		0.30	90.00		
							270.00	**102.82**	**27761.00**
	Basic Rate	97.00							
	Area Weightage @ 6%	5.82							
	Total	**102.82**							
13	KSRB 14.6-1 : Providing and laying **heavy duty cobble stones 60mm** thick interlock pavers, using cement and course sand for manufactures of blocks of approved size , shape and colour with a minimum compressive strength of 281kgs per sqm over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour, curing complete as per specifications. Page No.103/ Item No. 14.6 / PWD SR 2018-19	Sqm							
	For Wacking Track		1	180.00	1.50		270.00		
	For Telecom Layout Park		1	127.00	1.50		190.50		
							460.50	1105.65	**509152.00**
	Basic Rate	1053.00							
	Area Weightage @ 6%	52.65							
	Total	**1105.65**							
14	KSRB 15-18.2 : Providing and applying enamel metal paint two coats (excluding priming coat) over new steel or other metal surface brushing to give an even shade after cleaning oil, grease, dirt and other foreign matter, including cost of materials, labour, complete as per specifications. Page No. 123/ Item No. 15.74/ PWD SR -2018-19	Sqm							
	For Fencing		2	300.00		1.50	**900.00**		
	For Telecom layout Park		2	150.00		1.50	**450.00**		
							1350.00	100.70	**135945.00**
	Basic Rate	95.00							
	Area Weightage @ 6%	5.70							
	Total	**100.70**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
15	Providing and fixing Cement Concrete Benches with Base, Back rest and Pedestals of size, Shape and Design including Transportation and with lead and lift, loading and unloading, Earthwork excavation and fixing in 1:4:8 (wherever necessary) and curing etc., complete as per standard Specification and direction of engineer in charge.	Nos							
			15				**15.00**	10510.00	**157650.00**
	Data Rate	**10510.00**							
16	Providing and laying/fixing cement base, precast, pre polished cement concrete, designer tiles 25mm thick for flooring conforming to IS 1237 heavy duty tiles for flooring, treads of steps and landing, laid on a bed of 12mm thick cement mortar 1:3 mis finished with flush pointing using white cement, including cost of materials, including cutting, griding the edge to half/full round wherever required, labour, curing complete as per specification. (P.No. 112, I.No. 14.62 of PWD SR 2018-19)	**Sqm**							
	For Concrete Benches		15	2.60	2.60		101.40		
	For Plying Equipment area		1	17.30	13.10		226.63		
							328.03	1305.92	**428381.00**
	Basic Rate	1232.00							
	Area Weightage @ 6%	73.92							
	Total	**1305.92**							
17	Supply and Fixing of Pull Down Challenger. Metal: All tubular steel of 2 .5mm thickness are galvanized and zinc dipped. Joints are Robotic welded. All weld d joints are scalloped as necessary and welded to an approved MIG process.All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at II the welding points prior to finishing . All metal parts are powder coated using AKZO Nobel-Great Wall powder to the thickness of 80-120 microns. Allmetal parts are tested in our salt spray machine that uses a 5% NaCl solution in accordance to 1507227 to speed up corrosion for 3000 hrs. Rubber: High quality grip rubber is used for th e handles. Bearings:Maintenance-free ball bearings. Scope of delivery: 1completely pre-assembled equipment modules. Maintenance:	**Each**							
			1				**1.00**	260544.00	**260544.00**
	Data Rate	**260544.00**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
18	Supply and fixing of Seated Chest Press. Metal: All tubular steel of 2.Smm thikness are galvanized and z inc dipped. Joints are Robotic welded. All welded joints t1H • scalloped as necessary and welded to an approved MIG process. All welds an• 111 csed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the w 11lt1ing points prior to finishing. All metal parts are powder coated using AKZO Nobel (11 ca t Wall powder to the thickness of 80-120 microns. All metal parts are tested in rn 1r a lt spray machine that uses a 5% NaCl solution in accordance to 1507227 to speed up corrosion for 3000 hrs. Rubber: High quality grip rubber is used for the handle!,,Bearings: Maintenance-free ball bearings. Scope of delivery: 1completely Prt' ,ssembled equipment modules. Maintenance: Maintain according to EN 166630 and the maintenance guide. Safety:	**Each**							
			1				**1.00**	230000.00	**230000.00**
	Data Rate	**230000.00**							
19	Supply and fixing of Self Weighted Rower. Metal: All tubular steel of 2.Smm thit.kness are galvaniied and zinc dipped. Joints are Robotic welded. All welded joiflts arc scalloped as necessary and welded to an approved MIG process. All welds arc dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel-Great Wall powder to the thickness of 80-120 microns. All metal parts are tested in our sa lt S'PI,ray machine.that uses a 5% NaCl solution in accordance to IS07227 to speed up3 c_6rrosion for 3000 hrs. Colour RAL 5019 Blue and RAL 1014 Beige Rubber: High quality grip rubber is used for the handles. Bearings: Maintenance-free ball bearings. Scope of delivery: 1completely pre-assembled equipment modules. Maintain according to EN 16630 and the maintenance guide. Safety:All								
			1				**1.00**	165000.00	**165000.00**
	Data Rate	**165000.00**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
20	Supply and fixing of Elliptical Cross Trainer. Metal: All t\jbular steel of 2.Smm thickness are galvanized and zinc dipped. Joints are RClbotic welded. All weldecl 1oints a re scalloped as necessary and welded to an approve(j MIG process. All welds .i re dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at .ill the welding points prior to finishing. Alt metal parts are PCl\vder coated using AKZO Nobel Great Wall powder to the thickness of 80-120 microns. All metal parts are testecJ in our salt spray machine that uses a 5% NaCl solution iri ilccordance to IS07227 to speed up corrosion for 3000 hrs. Rubber: High quality €rip rubber is used for the handles. Bearings: Maintenance-free ball bearings. Scope of delivery: 1completely.pre-assembled equipment modules. Maintenance: Maintain according to EN 1G630 and the maintenance guide. Safety: All products must be tested and	Each							
			1				**1.00**	140000.00	**140000.00**
	Data Rate	**140000.00**							
21	Supply and Fixing of Rider. Metal: All tubular steel of 2.smm thickness are galvd 1 ilzed and zinc dipped . Joints are Robotic welded. All weldect joints are scalloped as necessary and welded to an approved MIG proi;ess. .<\11 welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the welding points prior to finishing.All metal parts are powder Clated using AKZO Nobel-G reat Wall powder to the thickness of 80-120 microns. All Il\etal parts are tested in our sa lt spray machine that uses a 5% NaCl solution in accorcJ<ince to 1507227 to speed up corrosion for 3000 hrs. Rubber: High quality grip rubher is used for the handles. 5 Bearings : Maintenance-free ball bearings...Scope of c:l livery: 1completely pre-assembled equipment modules. Maintenance: Maint<1in according to EN 16630 a nd	Each							
			1				**1.00**	90000.00	**90000.00**
	Data Rate	**90000.00**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
22	Supply and Fixing of Bicycle. Metal: All tubular steel of 25mm thickness are galvani zed and zinc dipped. Joints are Robotic welded. All welded joint s are S('.llloped as necessary and w eldea to an approved MIG process. All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the weltling points prior to finishing.All metal parts are powder coated using AKZO Nobel GreatWall powder to the thickness of 80- 120 microns. All metal parts are tested in our salt v pray machine that uses a 5% NaCl solution in accordance to IS07227 to speed up - orrosion for 3000 hrs. Rubber: High quality grip rubber is used for the handles. each 1 125000 125000 131188 131188 134500 134500 Bearings: Maintenance-free ball bearings . Scope of delivery: 1completely pre assembled equipment modules. Maintenance:	**Each**							
			1				**1.00**	125000.00	**125000.00**
	Data Rate	**125000.00**							
23	Supply and Fixing of Arm & Pedal Bike. Metal: All tubular steel of 2.Smm thickness a re galvanized and zinc dipped.Joints are Robotic welded.All welded joints are sca lloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel-Great Wall powder to the thickness of 80-120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCl solution in accordance to IS07227 to speed up corrosion for 3000 hrs. Rubber: High quality grip rubber is used for the handles.Bearings : Maintenance-free ball bearings.Scope of delivery: 1completely pre-assembled equipment modules. Maintenance: Maintain according to EN 16630 and	**Each**							
			1				**1.00**	170000.00	**170000.00**
	Data Rate	**170000.00**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
24	Supply and Fixing of Tai Chi Spinners .Metal: All tubular steel of 2.Smm thicknp<.s are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are sc;illoped as necessa ry and welded to an approved MIG process. All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the w eldin points prior to finishing. All metal parts are powder coated using AKZO Nobel G reat Wall powder to the thickness of 80- 120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCl solution in accordance to JS07227 to speeu up corrosion for 3000 hrs. Colour RAL 5019 Blue and RAL 1014 Beige Rubber: High quality grip rubber is used for the handles. Bearings: Maintenance -free ball bearings. Scope of delivery: 1completely pre-assembled equipment modules. Maintena nce:Maintain according to EN 16630 and the maintenance guide. Safety: All products must be tested and	**Each**							
			1				**1.00**	115000.00	**115000.00**
	Data Rate	**115000.00**							
25	Supply and fixing of Twist Stepper. Metal: All tubular steel of 2.Smrn thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are sca lloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel-GreatWall powder to the thickness of 80-120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCl solution in accordance to IS07227 to speed up corrosion for 3000 hrs. Rubber: High quality grip rubber is used for the handles. Bearings: Maintenance-free ball bearings.Scope of delivery: 1completely pre-assembled equipment modules. Maintenance: Maintain according to EN 16630 and the maintenance guide. Safety: All products must be tested and certified	**Each**							
			1				**1.00**	180000.00	**180000.00**
	Data Rate	**180000.00**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
26	Supply and fixing of HD Health Walker. Metal: All tubular steel of 2.Smm thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joint s arescalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel-Great Wall powder to the thickness of 80-120 microns. All metal parts are tested in our salt spray machine that uses a S% NaCl solution in accordance to IS07227 to speed up corrosion for 3000 hrs. Colour RAL 5019 Blue and RAL 1014 Beige Rubber: High quality grip rubber is used for the handles. Bearings: Maintenance-free ball bea rings.11 Scope of delivery: 1completely pre-assembled equipment modules. Maintenance: Maintain according to EQ_and the maintenance guide.Safety: All productsmust be tested and certified to meet EN16630 safety standards with GS test mark. The EN 16630	Each							
			1				1.00	140000.00	140000.00
	Data Rate	140000.00							
27	Supply and fixing of HD Waist Twister. Metal : All tubular steel of 2.Smm thic k11ess are ga:vanized and zinc dipped. Joints are Robotic welded. All welded joints are scJlloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel-Great Wall powder to the thickness of 80-120 microns.Al l metal parts are tested in our salt spray machine that uses a 5% NaCl solution in accordance to IS07227 to speed up rrosion for 3000 hrs. Rubber: High quality grip rubber is used for the handles. arings : Maintenance-free ball bearings.Scope of delivery: 1completely pre-assembled equipment modules. Maintenance : Maintain according to EN 16630 and the maintenance guide. Safety: All	Each							
			1				1.00	130000.00	130000.00
	Data Rate	130000.00							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
28	Providing ,fabricating and fixing Special Multiplay Systems consists of FRP moulded with Aluminium chequered platforms of size 5x5 ft with 4 support piller made out of 75 mm dia G.I "B"pipes fixed in cement concrete 1:2:4.The patforms are to be covered with pyramid shaped FRP roof. The platform is to be with tubular slide & Mini Aquva tunnel Slide made up of high quality FRP the slide is to fixed at a height of 11ft and runs for a length of not less than twenty ft and the slide should be supported at regular intervals of 6ft using M.S pipes support and the platform ladder with 25mm dia MS pipes with suitable hand rails and steps made out of G I sheet with tred 4" with powder coated finish,fine quality FRP	**Each**							
			1				**1.00**	595000.00	**595000.00**
	Data Rate	**595000.00**							
29	KSRRB M2700-4. Providing, fitting and fixing mild steel railing complete as per drawing and Technical Specification complete as per specifications MORTH Specification No. 2703.2, 1900(Page No 247 Item No 32.4 of PWD SR 2018-19)	**Rmt**							
			1	120.00			**120.00**	2796.28	**335554.00**
	Basic Rate	2638.00							
	Area Weightage @ 6%	158.28							
	Total	**2796.28**							
30	KSRB 4.2.2 : Providing and laying in position reinforced cement concrete of Design Mix M20 with OPC @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregtes @ 0.460 cum, with super plasticisers @ 3 liters confirming to IS 9103-1999 reafirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters columnspillars posts	**Cum**							
	For Street Lights		14	0.45	0.45	0.55	**1.56**	5998.54	**9353.00**
	Basic Rate	5659.00							
	Area Weightage @ 6%	339.54							
	Total	**5998.54**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
31	Fabricating, supplying and erection of .....Mtrs long hot dip Galvanized Conical pole with BSEN 10025 grade S 355 JO steel plate for shaft, IS 2062 for base plate with door opening arrangements, including suitable boards, Bakelite sheet and MCBs as per IS specifications suitable to withstand the wind speed of 47 m/sec for .....Mtrs pole in single section and single joint welded as per IS 9595/IS 10178AWS having dimensions bottom .....mm, top....mm with 3mm thick suitable base plate	Each							
			4				**4.00**		
			10				**10.00**		
							14.00	15241.82	**213385.00**
32	Supplying of 1.1 KV class UG cable in having aluminium conductor PVC insulated, sheathed, galvanised, steel wire/steel tap armoured cable with PVC outer sheathing 1.1 KV class (P.No.55, I.No.7.4)	Mtrs							
	4 Core 10 Sqmm		1	500.00			**500.00**	128.97	**64485.00**
33	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7) P No. 61 / I. No. 7.9.3 KPWD Electrical SR 2014-15	Mtrs							
			1	500.00			**500.00**	92.28	**46140.00**
34	Labour charges for laying of UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.In existing trench/duct. P No. 61 / I No. 7.8.1 6Sqmm to 16Sqmm) KPWD Electrical SR 2014-15	Mtrs							
			1	500.00			**500.00**	11.72	**5860.00**
35	Supplying and fixing of heavy duty cable glands suitable or UG cable o 1.1KV class (metal only)(P.No.62, I.No.7.14)	Each							
	25 MM Dai		14				**14.00**	93.36	**1307.00**
36	Supplying tinnd copper lugs and crimping and wiring to terminal point for wire of the following sizes (P.No.64, I.No.7.21)	Each							
			14				**14.00**	8.3	**116.00**
37	Supplying, and fixing of Hot dip Galvanized M.S.Bracket suitable for out door luminaries and mounted on Octagonal pole using necessary bolts, nuts etc., complete.Single Arm Bracket with 1500mm Standard 40/50MM dia(P.No.36, I.No.5.18.2)	Each							
	Single arm Bracket with 1500MM Standard 40/50 MM dia		14				**14.00**	2605.44	**36476.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
38	LED Street light. Supply of LED Streetlight with pressure die cast aluminum housing body with optimal heat sink for better thermal dissipation. Diffuser with Injection moulded & is made of polycarbonate material with high transmission index, delivering superior light output. Rated life Burning Hrs. 50000 hr. @ Lumen Maintenance of 70%. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains Current should not be greater than 0.1A to 0.7A & Surge Protection- Min 4 KV along with Over voltage/Overload, short circuit/ miswiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application.)Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools.	**Each**							
			10				**10.00**	37170.94	**371709.00**
	Data Rate	**37170.94**							
39	Supply, installtion, testing and commissioning of STREET LIGHT PANEL made up of 16SWG CRCA sheet for body and 14 SWG CRCA sheet for door, outdoor type, floor mounting, powder coated,Degree of projection IP56, with necessary hard ware, interconnection wiring & accessories complete comprising of the following Incomming : 63A 4P 10KA MCB + 2 nos. 32A 3P AC1 contactor + 2 nos. 24hrs Timer Outgoings :18	**Each**							
			2				**2.00**	4885.20	**9770.00**
	Data Rate	**4885.20**							
40	Precast slab 20mm and down size for slab (including steel reinforcement) including centring and shutterng machine mixed concrete laid in layers not exceeding 15cms thick well compacted cost of all materials labour HOM of machineries curing complete as per specifications c.c 1:1.5:3 Including all cost of Matirial (DATA	Sqm							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
			2	54.00	0.90		97.20		
							97.20	2100.00	**204120.00**
	Data Rate	2100.00							
41	KSRRB M100-2. Loading and Unloading of stone boulders by manual means complete as per specification MORTH-100/chapter-1 Page No. 136/ Item No. 17.1/ PWD SR 2018-19	Cum							
			Qty. Vide Item No. 2				**505.33**		
							505.33	60.42	**30532.00**
	Basic Rate	57.00							
	Area Weightage @ 6%	3.42							
	Total	**60.42**							
									8460516.00
42	For 12% Applicable GST								1015262.00
43	For 3% KRIDL Charges								253815.00
44	For 1% Labour Cess								84605.00
45	For 1% DPR and PMC Charges								84605.00
46	Miscesallaneous Charges	L/S							1197.00
								Total	**9900000.00**

#NAME?

CERTIFICATE

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per PWD SR of 2018-19 and Approved Data Rate
3 This Estimate Grant under SC-SP/TSP Mukyamantrigala Nava Bengaluru Yojane
4 The provisions were made in this estimate are necessary and adequate.
5 This works come under B.B.M.P. limits.

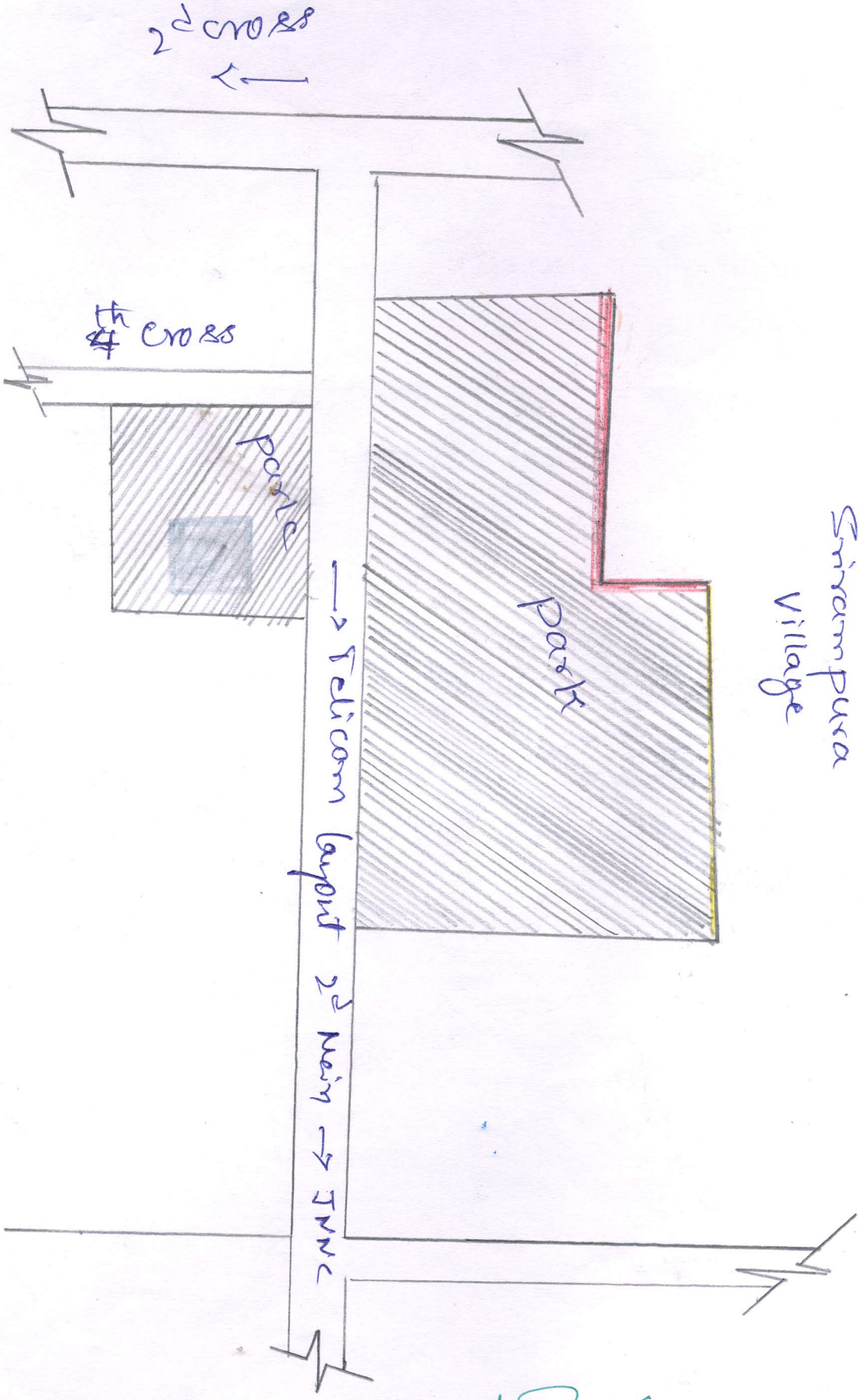
Assistant Engineer
ಸಹಾಯಕ ಅಭಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

Executive Engineer
Byatarayanapura Division
Bruhat Bangalore Mahanagara Palike

Assistant Executive Engineer
ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

ADMINISTRATIVE APPROVAL
Accorded For Rs. 99.00 Lakhs only
Head of A/C. P3727
Div. Ref. No. 87/19-20 Date 5-11-19
AE EE(BTP)

Technical Sanction
Accorded For Rs 99.00 Lakhs only
Head of A/C. P 3727
CER NO : 255 Dt: 11.11.2019
TA CE (YNK)



ಸಹಾಯಕ ಅಭಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Name of work: Improvements to Roads and Drain at Srinivaspura Village in ward No. 05

			Estimate Cost Rs.					9900000.00	
Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	KSRRB 300-1. Earth work excavation by manual means in Ordinary Soil soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications.MORTH chapter 3. No. 143/ Item No. 19.1/ PWD SR 2018-19	Cum							
	For Road Surface for CC road		1	130.00	5.00	0.23	149.50		
			1	130.00	5.00	0.23	149.50		
			1	140.00	5.00	0.23	161.00		
	For Asphat road		3	150.00	5.00	0.20	450.00		
	For Culverts		4	6.20	2.10	0.90	46.87		
	For RCC Drain		1	387.00	0.90	0.90	313.47		
	For Road Cutting Portion		3	150.00	0.90	0.45	182.25		
							1452.59	137.80	**200167.00**
	Basic Rate	130.00							
	Area Weightage @ 6%	7.80							
	Total	**137.80**							
5	KSRRB M600-3. Construction of Rolled Cement Concrete mix 1:4:8 OPC cement @180kgs, with 25mm and down size graded granite metal coarse aggregate at 0.85cum and fine aggregates @0.57cum base course with coarse and fine aggregate conforming to IS:383, aggregate cement ratio 12:1 and minimum cement content of 180kg/ cum, aggregate gradation to be as per Table 600-4 after blending, mixing in batching plant at optimum moisture content, transporting to site, laying with a paver with electronic sensor, compacting with 8-10 tonnes smooth wheeled vibratory roller to achieve, the designed flexural strength, finishing and curing complete as per specifications - No. 175/ Item No. 22.3/ PWD SR 2018-19	**Cum**							
	For CC Road		1	130.00	5.00	0.15	97.50		
			1	130.00	5.00	0.15	97.50		
			1	140.00	5.00	0.15	105.00		
	For Culverts		4	6.20	2.10	0.15	7.81		
	RCC Drains		1	387.00	0.90	0.15	52.25		
							360.06	3606.12	**1298409.00**
	Basic Rate	3402.00							
	Area Weightage @ 6%	204.12							
	Total	**3606.12**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
3	KSRB 5.2.3 Providing and constructing granite / trap / basalt Size stone masonry in foundation with cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5.1.13 Page No. 25/ Item No. 5.6/ PWD SR 2018-19	cum							
	Culverts		4X2	6.20	0.60	0.50	14.88		
							14.88	4871.76	**72492.00**
	Basic Rate	4596.00							
	Area Weightage @ 6%	275.76							
	Total	**4871.76**							
4	KSRB 5.3-3 Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5-1.13 Page No. 25/ Item No. 5.9/ PWD SR 2018-19	**Cum**							
	For Culverts		4X2	6.20	0.50	0.45	11.16		
							11.16	**5305.30**	**59207.00**
	Basic Rate	5005.00							
	Area Weightage @ 6%	300.30							
	Total	**5305.30**							
5	KSRB 4-6.7 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for sides and soffits of beams, beam haunchings, cantilever girders, bressumers and lintels not exceeding 1 m in depth including cost of all materials, labour complete as per specifications. Specification NO KBS 4.6.2 Page No. 17/ Item No. 4.34/ PWD SR 2018-19	**Sqm**							
	For RCC Drains		2X2	387.00	0.60		928.80		
	For Culverts		4	6.20	0.60		14.88		
	For Sides		4X2	6.20	0.23		11.41		
			4X2	1.65	0.23		3.04		
							958.12	**309.52**	**296559.00**
	Basic Rate	**292.00**							
	Area Weightage @ 6%	17.52							
	Total	**309.52**							
6	KSRB 4-1.7 : : Providing and laying in position plain cement concrete of mix 1:3:6 withOPC cement @ 220kgs, with 20mm and down size graded granite metal coarse aggregates @0.84cum and fine aggregates @0.56cum machine mixed, concrete laid in layers not, exceeding 15cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2/P No. 13/ Item No. 4.7/ PWD SR 2018-19	**cum**							
	For RCC Drain Vent		1	387.00	0.90	0.10	34.83		
	Culverts		4X2	6.20	0.50	0.15	3.72		

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Vent Bed		4	6.20	0.90	0.10	2.23		
							40.78	5627.54	**229502.00**
	Basic Rate	5309.00							
	Area Weightage @ 6%	318.54							
	Total	**5627.54**							
7	KSRB 15.1.3: Providing FLush pointing to coursed stone masonry with cement mortar 1:3, 20 mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. Page No. 115/ Item No. 15.1/ PWD SR 2018-19	Sqm							
	Culverts		4X2	6.20		0.50	24.80		
							24.80	223.66	**5547.00**
	Basic Rate	211.00							
	Area Weightage @ 6%	12.66							
	Total	**223.66**							
8	KSRB 4.2.2 : Providing and laying in position plain cement concrete of mix M20 withOPC cement @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.878cum and fine aggregates @0.459cum with superplastesisre @ 3lts conforming to IS9103-1999Reffirmed machine mixed exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, return walls, walls(any thickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc, including cost of all materials, labour HOM of machinery, curing, complete as per specifications. Specification. No. KBS 4.1,4.6, No. KBS 4.1,4.6, No. 14/ Item No. 4.11/ PWD SR 2018-19	**Cum**							
	For New RCC Drains								
	Bottom Concrete		1	387.00	0.90	0.15	52.25		
	Side Walls		1X2	387.00	0.15	0.60	69.66		
	For Cuvlerts		4	6.20	1.80	0.23	10.27		
							132.17	5998.54	**792840.00**
	Basic Rate	5659.00							
	Area Weightage @ 6%	339.54							
	Total	**5998.54**							
9	KSRB 4.9.2:providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost pf materials, labour, HOM of machinery complete as per specifications.Specification No. KBS 4.6.3 Page No. 18/ Item No. 4.46.2/ PWD SR 2018-19	**Tonne**							
	0.65Ton/Cum		0.065	132.17			**8.59**	75223.96	**646264.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Basic Rate	70966.00							
	Area Weightage @ 6%	4257.96							
	Total	**75223.96**							
10	Precast slab 20mm and down size for slab (including steel reinforcement) including centring and shutterng machine mixed concrete laid in layers not exceeding 15cms thick well compacted cost of all materials labour HOM of machineries curing complete as per specifications c.c 1:1.5:3 Including all cost of Matirial (DATA RATE ENCLOSED) 10cm thick RCC pre cast slab	Sqm							
	For RCC Drain		1	387.00	0.90		348.30		
							348.30	2100.00	**731430.00**
	Data Rate	**2100.00**							
11	Providing and laying cement concrete using 20mm and down size granite jelly of ready mixed concrete (RMC)for R.C.C works laid in 15cms thick layers and well compacted vibrating, curing, finishing with necessary cement mortar, form works and scaffoldings to withstand pumping of concrete, with all lead and lifts etc., complete (exclusive of cost of steel and fabrication charges.) Ready mixed Cement concrete M-20 for raft foundation, column footing, main and secondary beams. Page No. 18/ Item No. 4.48/ PWD SR 2018-19	Cum							
	For CC Road		1	130.00	5.00	0.10	65.00		
			1	130.00	5.00	0.10	65.00		
			1	140.00	5.00	0.10	70.00		
							200.00	5770.64	**1154128.00**
	Basic Rate	5444.00							
	Area Weightage @ 6%	326.64							
	Total	**5770.64**							
12	KSRRB M2600-3: (ii) Providing & fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specification complete as per specifications, MORTH specification No. 2605, No. 233/ Item No. 31.3 PWD SR 2018-19	M							
	For CC Road		20	5.00			100.00		
			20	5.00			100.00		
			25	5.00			125.00		
							325.00	126.14	**40996.00**
	Basic Rate	119.00							
	Area Weightage @ 6%	7.14							
	Total	**126.14**							
13	Vaccum De- writing with vaccum pump and suction mat and compaction with skin flater clubbed with floatiog disc including cost of generator, HOM of machinery Sereed Vibratory Power Floaterblade and diisc etc. with all lead and lift No. 171/ Item No. 22.7/ PWD SR 2018-19	Sqm							
	For CC Road		1	130.00	5.00		650.00		
			1	130.00	5.00		650.00		
			1	140.00	5.00		700.00		
							2000.00	**72.08**	**144160.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Basic Rate	68.00							
	Area Weightage @ 6%	4.08							
	Total	**72.08**							
14	KSRRB M400-17: Providing, laying spreading and compacting graded stones aggregate to **wet mix macadam** specifications including premixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying, in uniform layers with paver in sub base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH specification NO. 406,P No. 155/ Item No. 20.18/ PWD SR 2018-19	Cum							
	For Asphat road		3	150.00	5.00	0.23	517.50		
	For Road Cutting Portion		3	154.00	0.90	0.35	145.53		
							663.03	2001.28	**1326909.00**
	Basic Rate	1888.00							
	Area Weightage @ 6%	113.28							
	Total	**2001.28**							
15	KSRRB 500-4: providing and applying **primer coat** from 7.5 to 9.8 kg and 9.8 to 12.2kg per 10 sqm for surfaces of low and medium porosity respectively over prepared surface of granular base with cut bank M.C-70 or any other bitumen mixed with diesel at 10 kg per 10 sqm heated in bitumen boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specificationsDo- Medium Porosity MORTH chapter 5, No. 158/ Item No. 21.6/ PWD SR 2018-19	Sqm							
			3	150.00	5.00		2250.00		
							2250.00	36.04	**81090.00**
	Basic Rate	34.00							
	Area Weightage @ 6%	2.04							
	Total	**36.04**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
16	KSRRB 500-11: Providing and laying **bituminous macadam** on prepared surface with crushed coarse aggregates as per design mix formula for base / binding course including loading of aggregates with F.E. loader, hot mixing of stone aggregates and bitumen in hot mix plant 40 tonne capacity, transporting the mixed material in tipper to paver and laying mixed materials with paver finisher to the required level and grade, rolling by power roller to achieve the desired density, 50 / 75mm compacted thickness with 3.3% bitumen but excluding cost of primer / tack cost with lead upto 1km including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH chapter 5, With 60 / 70 grade bitumen, No. 159/ Item No. 21.11.2/ PWD SR 2018-19	**Cum**							
			3	150.00	3.00	0.05	67.50		
							67.50	6823.44	**460582.00**
	Basic Rate	6318.00							
	Area Weightage @ 8%	505.44							
	Total	**6823.44**							
17	KSRRB 500-9: providing and applying tack coat on granular base such as WBM and WMM surfaces hot bitumen primed at 10 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH specifications 5, No.160/ Item No. 21.9/ PWD SR 2018-19	**Sqm**							
			3	150.00	3.00		1350.00		
							1350.00	24.84	**33534.00**
	Basic Rate	23.00							
	Area Weightage @ 8%	1.84							
	Total	**24.84**							
18	KSRRB M500-19: providing and laying **bituminous concrete** 40mm thick with 100-120 TPH batch type hot mix plant producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder at 5.4 to 5.6% of mix and filler, transporting the hot mix to work site, laying with hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem roller to achieve the desire compaction as per MORTH specification clause No. 500.9 complete In all respects as per specifications. MORTH specification 30-45mm compacted thicikness (GradingII) With 6% bitumen 80/100, No. 161/ Item No. 21.22.1/ PWD SR 2018-19	**Cum**							
			3	150.00	5.00	0.04	90.00		
							90.00	8869.02	**798212.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Basic Rate	8367.00							
	Area Weightage @ 6%	502.02							
	Total	**8869.02**							
19	KSRRB M100-2. Loading and Unloading of stone boulders by manual means complete as per specification MORTH-100/chapter-1 Page No. 136/ Item No. 17.1/ PWD SR 2018-19	Cum							
			Qty. Vide Item No. 1+2				**1452.59**		
							1452.59	60.42	**87766.00**
	Basic Rate	57.00							
	Area Weightage @ 6%	3.42							
	Total	**60.42**							
							Grand Total		**8459794.00**
20	For 12% Applicable GST								1015175.00
21	For 3% KRIDL Charges								253794.00
22	For 1% Labour Cess								84598.00
23	For 1% DPR and PMC Charges								84598.00
23	Miscesallaneous Charges	L/S							**2041.00**
									9900000.00

Certificate:

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per PWD SR of 2018-19
3 This Estimate Grant under SC-SP/TSP Mukyamantrigala Nava Bengaluru Yojane
4 The provisions were made in this estimate are necessary and adequate.
5 This works come under B.B.M.P. limits.

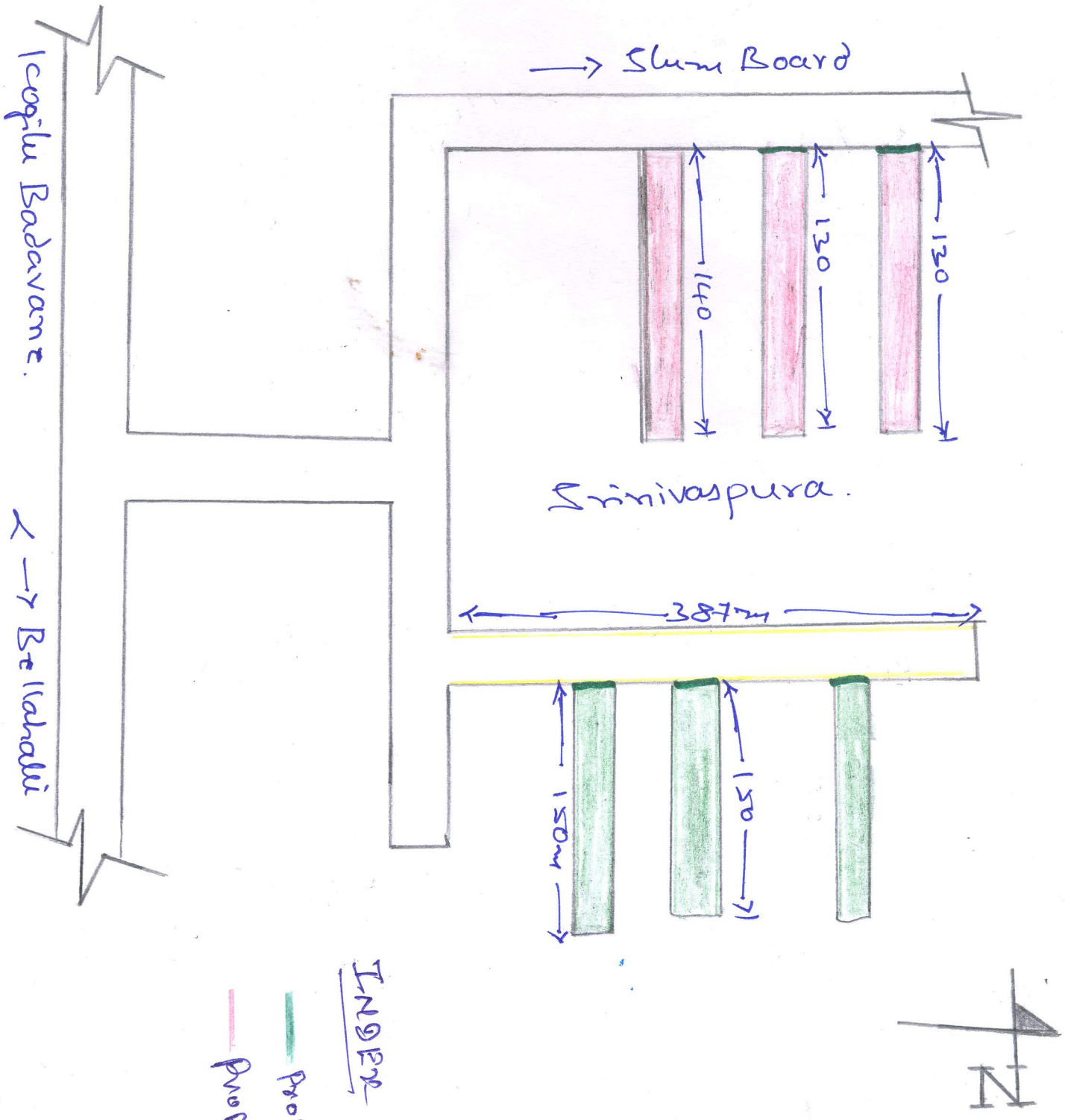
Assistant Engineer
Ward No. 05(Jakkur)

Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division

Assistant Executive Engineer
Byatarayanapura Sub Division

ADMINISTRATIVE APPROVAL
Accorded For Rs. 99.00 Lakhs only
Head of A/c. P3727
Div. Ref. No. 84/19-20 Date 24-10-19
AE EE(BTP) 24/10

Technical Sanction
Accorded For Rs 99.00 Lakhs only
Head of A/C P3727
CER NO :131 Dt 28-10-2019
TA CE (YNK)



INDEX

Proposed Concrete Road

Proposed Asphalt work

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Name of work: Improvements to CC Roads and Drains at Chokkanahalli Village in ward No. 05

			Estimate Cost Rs.					9900000.00	
Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	KSRRB 300-1. Earth work excavation by manual means in Ordinary Soil soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications.MORTH chapter 3. No. 143/ Item No. 19.1/ PWD SR 2018-19	Cum							
	For Culverts		6	6.20	2.10	0.90	70.31		
	Road Surface Chokkanahalli SC/ST Burial Ground Road		1	300.00	6.50	0.30	585.00		
			1	300.00	5.60	0.30	504.00		
	For Slab Drain		1	300.00	0.75	0.75	168.75		
			2	300.00	0.75	0.75	337.50		
	For RCC Drain		1	309.00	0.90	0.90	250.29		
							1915.85	137.80	**264004.00**
	Basic Rate	130.00							
	Area Weightage @ 6%	7.80							
	Total	**137.80**							
2	Providing granite slabs of selected quality roughly dressed and fixed in cement mortar(1:6) including fixing curing etc, complete -do- 7.5 cms thick Page No. 27/ Item No. 5.31.1/ PWD SR 2018-19	**Sqm**							
	For New Slab Drain		1	300.00	1.65		495.00		
			2	300.00	1.65		990.00		
							1485.00	742.00	**1101870.00**
	Basic Rate	700.00							
	Area Weightage @ 6%	42.00							
	Total	**742.00**							
5	KSRRB M600-3. Construction of Rolled Cement Concrete mix 1:4:8 OPC cement @180kgs, with 25mm and down size graded granite metal coarse aggregate at 0.85cum and fine aggregates @0.57cum base course with coarse and fine aggregate conforming to IS:383, aggregate cement ratio 12:1 and minimum cement content of 180kg/ cum, aggregate gradation to be as per Table 600-4 after blending, mixing in batching plant at optimum moisture content, transporting to site, laying with a paver with electronic sensor, compacting with 8-10 tonnes smooth wheeled vibratory roller to achieve, the designed flexural strength, finishing and curing complete as per specifications - No. 175/ Item No. 22.3/ PWD SR 2018-19	**Cum**							
	For Culverts		6	6.20	2.10	0.15	11.72		
	RCC Drains		1	309.00	0.90	0.15	41.72		
							53.43	3606.12	**192686.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Basic Rate	3402.00							
	Area Weightage @ 6%	204.12							
	Total	**3606.12**							
4	KSRB 5.2.3 Providing and constructing granite / trap / basalt Size stone masonry in foundation with cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5.1.13 Page No. 25/ Item No. 5.6/ PWD SR 2018-19	cum							
	Culverts		6X2	6.20	0.60	0.50	22.32		
							22.32	4871.76	**108738.00**
	Basic Rate	4596.00							
	Area Weightage @ 6%	275.76							
	Total	**4871.76**							
5	KSRB 5.3-3 Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5-1.13 Page No. 25/ Item No. 5.9/ PWD SR 2018-19	**Cum**							
	For Culverts		6X2	6.20	0.50	0.45	16.74		
							16.74	**5305.30**	**88811.00**
	Basic Rate	5005.00							
	Area Weightage @ 6%	300.30							
	Total	**5305.30**							
6	KSRB 4-6.7 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for sides and soffits of beams, beam haunchings, cantilever girders, bressumers and lintels not exceeding 1 m in depth including cost of all materials, labour complete as per specifications. Specification NO KBS 4.6.2 Page No. 17/ Item No. 4.34/ PWD SR 2018-19	**Sqm**							
	For RCC Drains		1X2	309.00	0.60		370.80		
	For Culverts		6	6.20	0.60		22.32		
	For Sides		6X2	6.20	0.23		17.11		
			6X2	1.65	0.23		4.55		
							414.79	**309.52**	**128385.00**
	Basic Rate	**292.00**							
	Area Weightage @ 6%	17.52							
	Total	**309.52**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
7	KSRB 4-1.7 : : Providing and laying in position plain cement concrete of mix 1:3:6 withOPC cement @ 220kgs, with 20mm and down size graded granite metal coarse aggregates @0.84cum and fine aggregates @0.56cum machine mixed, concrete laid in layers not, exceeding 15cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2/P No. 13/ Item No. 4.7/ PWD SR 2018-19	cum							
	For RCC Drain Vent		1	309.00	0.90	0.15	41.72		
	Culverts		6X2	6.20	0.50	0.15	5.58		
	Vent Bed		6	6.20	0.90	0.15	5.02		
							52.32	5627.54	**294416.00**
	Basic Rate	5309.00							
	Area Weightage @ 6%	318.54							
	Total	**5627.54**							
8	KSRB 15.1.3: Providing FLush pointing to coursed stone masonry with cement mortar 1:3, 20 mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. Page No. 115/ Item No. 15.1/ PWD SR 2018-19	Sqm							
	Culverts		6X2	6.20		0.50	37.20		
							37.20	223.66	**8320.00**
	Basic Rate	211.00							
	Area Weightage @ 6%	12.66							
	Total	**223.66**							
9	KSRB 4.2.2 : Providing and laying in position plain cement concrete of mix M20 withOPC cement @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.878cum and fine aggregates @0.459cum with superplastesisre @ 3lts conforming to IS9103-1999Reffirmed machine mixed exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, return walls, walls(any thickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc, including cost of all materials, labour HOM of machinery, curing, complete as per specifications. Specification. No. KBS 4.1,4.6, No. KBS 4.1,4.6, No. 14/ Item No. 4.11/ PWD SR 2018-19	**Cum**							
	For New RCC Drains								
	Bottom Concrete		1	309.00	0.90	0.15	41.72		
	Side Walls		1X2	309.00	0.15	0.75	69.53		
	For Cuvlerts		6	6.20	1.80	0.23	15.40		
							126.64	5998.54	**759660.00**
	Basic Rate	5659.00							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Area Weightage @ 6%	339.54							
	Total	**5998.54**							
10	KSRB 4.9.2:providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost pf materials, labour, HOM of machinery complete as per specifications.Specification No. KBS 4.6.3 Page No. 18/ Item No. 4.46.2/ PWD SR 2018-19	**Tonne**							
	0.70Ton/Cum		0.070	126.64			**8.86**	75223.96	**666850.00**
	Basic Rate	70966.00							
	Area Weightage @ 6%	4257.96							
	Total	**75223.96**							
11	Precast slab 20mm and down size for slab (including steel reinforcement) including centring and shutterng machine mixed concrete laid in layers not exceeding 15cms thick well compacted cost of all materials labour HOM of machineries curing complete as per specifications c.c 1:1.5:3 Including all cost of Matirial (DATA RATE ENCLOSED) 10cm thick RCC pre cast slab	Sqm							
	For RCC Drain		1	309.00	0.90		278.10		
							278.10	2100.00	**584010.00**
	Data Rate	**2100.00**							
12	KSRRB M300-53: construction of embankment with approved material gravel/murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement table 300-2 complete as per specifications. (which includes cost of gravel/murrum, watering charges & compaction by vibratory roller) MORTH specification Page No. 147/ Item No. 19.60/ PWD SR 2018-19	Cum							
	Road Surface Chokkanahalli SC/ST Burial Ground Road		1	300.00	6.50	0.30	585.00		
			1	300.00	5.60	0.30	504.00		
							1089.00	**344.50**	**375161.00**
	Basic Rate	325.00							
	Area Weightage @ 6%	19.50							
	Total	**344.50**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
13	KSRRB 400-2: Providing, laying, spreading and compacting specified graded sand, gravel or any other course material in sub base course including premixing the material at OMC in mechanical mixer (pug mill), carriage of mixed material up to 1 km, spreading in uniform layers with motor grader on a prepared base and compacting, with power roller to achieve the desired density including all materials, labour, HOM of machinery, lighting, gurarding, barricading and maintenance of diversion complete as per specifications. MORTH chapter 4. No.153/ Item No. 20.2 / PWD SR 2018-19	Cum							
	Road Surface Chokkanahalli SC/ST Burial Ground Road		1	300.00	6.50	0.35	**682.50**		
			1	300.00	5.95	0.30	**535.50**		
							1218.00	**1322.88**	**1611268.00**
	Basic Rate	1248.00							
	Area Weightage @ 6%	74.88							
	Total	**1322.88**							
14	KSRRB M1400-14.2. Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with 3 wheeled steel / vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type of screening / binding Materials to fill up the interstices of coarse aggregate, watering and compacting to the required density. Material Using Scrining Crushable Type such as Moorum or Gravel Grading - II (Manual) Clause : 404 (P.154/I.20.14.1 PWD SR - 2018-19).								
	Road Surface Chokkanahalli SC/ST Burial Ground Road		1	300.00	6.50	0.15	292.50		
			1	300.00	5.60	0.15	252.00		
	Basic Rate	2192.00					**544.50**	**2323.52**	**1265157.00**
	Area Weightage @ 6%	131.52							
	Total	2323.52							
15	KSRRB M1400-14.5. Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with 3 wheeled steel / vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type of screening / binding Materials to fill up the interstices of coarse aggregate, watering and compacting to the required density. Material Using Scrining Crushable Type such as Moorum or Gravel Grading - III (Manual) Clause : 404 (P.155/I.20.14.3 PWD SR - 2018-19).								

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Road Surface Chokkanahalli SC/ST Burial Ground Road		1	300.00	6.50	0.10	195.00		
			1	300.00	5.60	0.10	168.00		
	Basic Rate	2322.00					**363.00**	**2461.32**	**893459.00**
	Area Weightage @ 8%	139.32							
	Total	2461.32							
16	KSRRB M100-2. Loading and Unloading of stone boulders by manual means complete as per specification MORTH-100/chapter-1 Page No. 136/ Item No. 17.1/ PWD SR 2018-19	Cum							
			Qty. Vide Item No. 1+2				**1915.85**		
							1915.85	60.42	**115756.00**
	Basic Rate	57.00							
	Area Weightage @ 6%	3.42							
	Total	**60.42**							
							Grand Total		**8458551.00**
17	For 12% Applicable GST								1015026.00
18	For 3% KRIDL Charges								253757.00
19	For 1% Labour Cess								84586.00
20	For 1% DPR and PMC Charges								84586.00
20	Miscesallaneous Charges	L/S							**3494.00**
									9900000.00

Certificate:

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per PWD SR of 2018-19
3 This Estimate Grant under SC-SP/TSP Mukyamantrigala Nava Bengaluru Yojane
4 The provisions were made in this estimate are necessary and adequate.
5 This works come under B.B.M.P. limits.

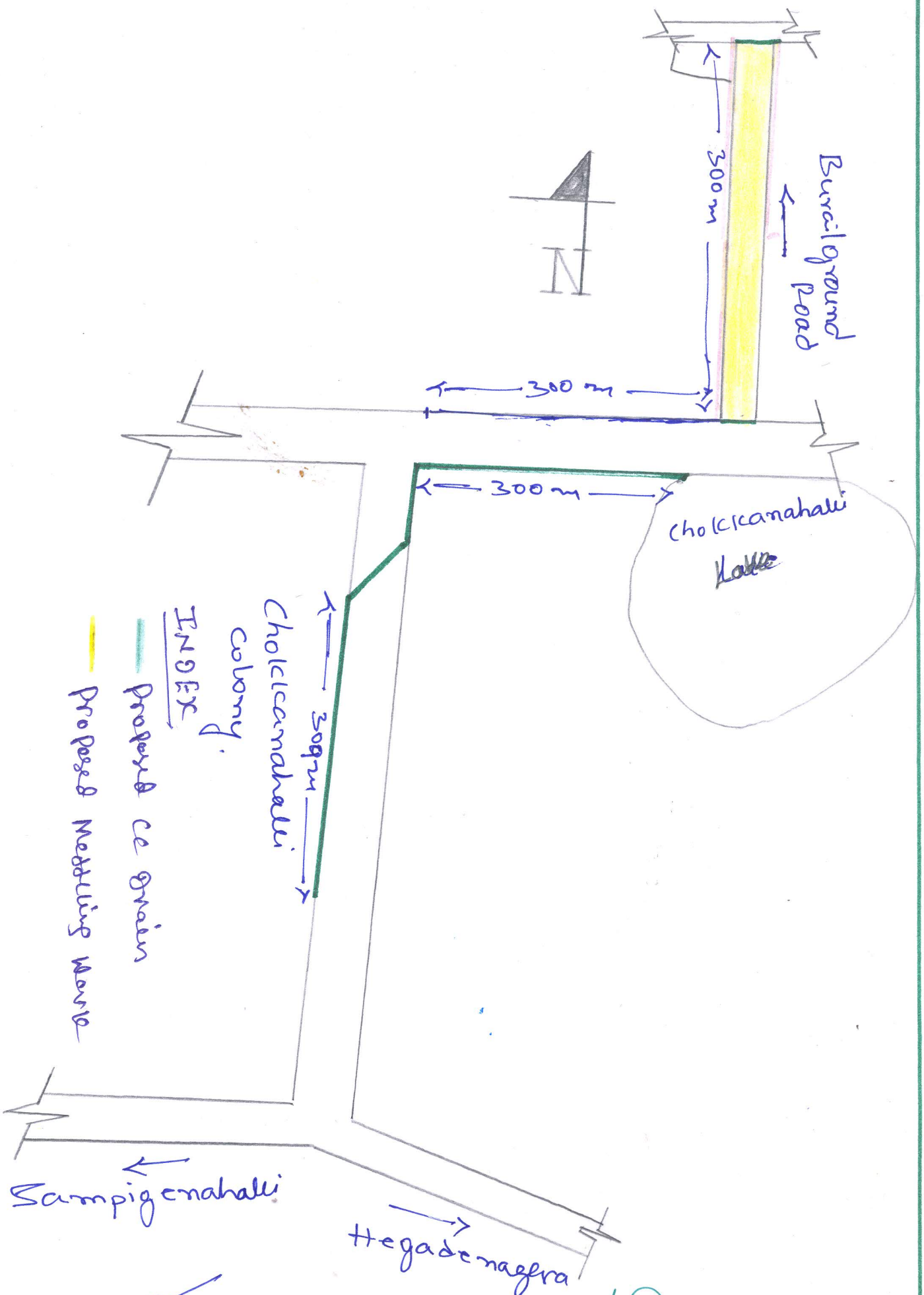
Assistant Engineer
Ward No. 05(Jakkur)

Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division

Assistant Executive Engineer
Byatarayanapura Sub Division

ADMINISTRATIVE APPROVAL
Accorded For Rs. 99.00 Lakhs only
Head of A/c. P3727
Div. Ref. No. 77/19-20 Date. 24-10-19
24/10
AE EE(BTP)

Technical Sanction
Accorded For Rs 99.00 Lakhs
Head of A/C. P3720
CER NO : 132 Dt: 28.10.2019
TA CE (YNK)



ಸಹಾಯಕ ಅಭಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯ ನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ, ಬೆಂಗಳೂರು-26